



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| | | | | |
|---|-------------|----------------------|---------------------------------|-----------------------------|
| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/709,848 | 06/02/2004 | Chun-Yi Chou | 12877-US-PA | 3847 |
| 31561 7590 11/30/2007 JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE 7 FLOOR-1, NO. 100 ROOSEVELT ROAD, SECTION 2 TAIPEI, 100 TAIWAN | | | EXAMINER MOON, SEOKYUN | |
| | | | ART UNIT 2629 | PAPER NUMBER |
| | | | NOTIFICATION DATE 11/30/2007 | DELIVERY MODE ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USA@JCIPGROUP.COM.TW

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/709,848 | CHOU, CHUN-YI | |
| | Examiner | Art Unit | |
| | Seokyun Moon | 2629 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24-34 is/are allowed.
- 6) ☒ Claim(s) 35, 45 and 46 is/are rejected.
- 7) ☒ Claim(s) 36-44 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. The Applicants' arguments regarding drawing/specification objection and rejections under 35 U.S.C. 112 1st paragraph have been fully considered and are persuasive. Accordingly, the objections and the rejections are withdrawn.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claim 35** is rejected under 35 U.S.C. 102(e) as being anticipated by Kumagai (US 2003/0218588).

Kumagai teaches a flat panel display ("LCD") [par. (0097) line 1], comprising:

a display panel ("LCD panel 10") [fig. 2];

a timing controller (means for providing "CLK IN", "RESET IN", and "DATA IN") [fig. 3] outputting a clock signal ("CLK IN"), a display data ("DATA IN"), and a control signal ("RESET IN");

a control circuit (means for providing "START IN") outputting a plurality of master/slave setting signals ("START IN" signals for a plurality of the source drivers); and

a plurality of source drivers ("data driver IC 17") [fig. 2], the plurality of source drivers being series-connected to be a series structure, the plurality of source drivers being coupled to the display panel

[fig. 2], one end of the series structure being coupled to the timing controller, the plurality of source drivers receiving the clock signal ("*CLK IN*"), the display data ("*DATA IN*"), and the control signal ("*RESET IN*") to drive the display panel [fig. 3], each of the plurality of source drivers responsive to a corresponding one of the plurality of master/slave setting signals ("*START IN*") determining whether to enhance a driving ability of the clock signal, the display data, and the control signal for use of another source driver in a next stage (note that all of the "*CLK IN*", "*DATA IN*", and "*RESET IN*" signals outputted to the output buffers are synchronized with the "*START IN*" signal, and thus the "*START IN*" signal determines when to output "*CLK IN*", "*DATA IN*", and "*RESET IN*" signals).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 45 and 46** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumagai.

⁴⁶
As to **claim 45**, Kumagai does not expressly disclose the display panel being a low temperature poly-silicon liquid crystal display panel.

However, the Examiner takes Official Notice that it is well known in the art to use a low temperature poly-silicon liquid crystal display as a display panel for a liquid crystal display.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the display panel of Kumagai to be a low temperature poly-silicon liquid crystal display panel since a low temperature poly-silicon liquid crystal display panel is well known for being used in small display panels of portable electronic devices.

As to ⁴⁵~~claim 46~~, Kumagai does not expressly disclose the display panel being a α -Si liquid crystal display panel.

However, since the Applicants have failed to disclose that specifying the type of the display panel as a α -Si liquid crystal display panel provides an advantage, is used for a particular purpose, or solves any stated problem, it is obvious matter of design choice to specify the type of the display panel as a α -Si liquid crystal display panel.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use any one of a low temperature poly-silicon liquid crystal display panel and a α -Si liquid crystal display panel as the display panel since any one of the types of the display panel would perform equally well at displaying images received from the source drivers.

Allowable Subject Matter

6. **Claims 24-34** are allowed.

7. **Claims 36-44** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seokyun Moon whose telephone number is (571) 272-5552. The examiner can normally be reached on Mon - Fri (8:30 a.m. - 5:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (572) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/709,848
Art Unit: 2629

Page 5

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

November 20, 2007

- s.m.


SUMATI LEFKOWITZ
SUPERVISORY PATENT EXAMINER